

I. Status of the Claims

Claims 1-346 are pending in this application. Claims 1-320, 323, 324, 326-328, 331-333, 336, and 339-346 have been withdrawn from consideration by the Examiner. New claim 347 has been added by this Amendment. Support for new claim 347 can be found in the originally-filed specification, for example, in the paragraph bridging pages 4 and 5.

II. Oath/Declaration

Although Applicants disagree that the Declaration submitted on March 23, 2001, is defective, in order to expedite prosecution, Applicants submit herewith a new executed Declaration.

III. Rejection Under 35 U.S.C. § 103

Claims 321, 322, 325, 329, 330, 334, 335, and 337 have been rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5,783,657 to Pavlin et al. ("Pavlin") in view of U.S. Patent No. 6,423,324 to Murphy et al. ("Murphy"), 1 McCUTCHEON'S EMULSIFIERS AND DETERGENTS 272-273 (1993) ("McCutcheon's"), and U.S. Patent No. 5,830,483 to Seidel et al. ("Seidel") for the reasons set forth on pages 4-5 of the present Office Action. Applicants respectfully traverse this rejection.

The Examiner acknowledges that "*Pavlin* et al. do not explicitly teach [the] oil-soluble cationic surfactant of the instant invention." See page 4 of the present Office Action. She concludes that "it would have been obvious to one having

ordinary skill in the art at the time the invention was made to modify the compositions of *Pavlin et al.* [] to employ cationic surfactants." See page 5 of the present Office Action. She reasons that "[o]ne having ordinary skill in the art would have been motivated to do this to further improve the stability and appearance of the *Pavlin's* compositions by reducing susceptibility of the composition to syneresis, modifying viscosity and improving the texture of the composition as suggested by *Murphy et al.*" *Id.* The Examiner also concludes that "it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ lauryl methyl gluceth-10 hydroxypropyl dimonium chloride as a cationic surfactant in compositions of *Pavlin et al.* in view of *Murphy et al.* for its art recognized purpose, i.e., for adjusting viscosity, as suggested by *Seidel et al.*" *Id.* Applicants respectfully disagree.

Two of the basic criteria that must be met in order to establish a prima facie case of obviousness are: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings and (2) there must be a reasonable expectation of success. In the present case, neither of these criteria has been satisfied with respect to the combination of reference teachings proposed by the Examiner.

With respect to the first criterion, the Federal Circuit has recently stated that:

[t]he factual inquiry whether to combine references must be thorough and searching. It **must be based on objective evidence of record**.... Thus the Board must not only assure that the requisite findings are made, based on evidence of

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record, **but must also explain the reasoning by which the findings are deemed to support the agency's conclusion.**

See *In re Lee*, 277 F.3d 1338, 1343 (Fed. Cir. 2002) (emphasis added). "To establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the **desirability** of making the specific combination that was made by the applicant." *In re Kotzab*, 217 F.3d 1365, 1371 (Fed. Cir. 2000) (emphasis added). Even when obviousness is based on a single prior art reference, there must be such a showing. See *B.F. Goodrich Co. v. Aircraft Braking Sys. Corp.*, 72 F.3d 1577, 1582 (Fed. Cir. 1996). Accordingly, the requirements discussed in *In re Lee*, *supra*, are equally applicable in cases where the Examiner proposes to modify a single reference. Moreover, the mere fact that references **can** be combined or modified does not render the resultant combination obvious unless the prior art **also suggests the desirability** of the combination. See M.P.E.P. § 2143.01.

In the present case, the Examiner has failed to make a factual inquiry based on any objective evidence of record. Such an inquiry would reveal that there would have been no motivation to make the proposed modifications at the time the invention was made, as discussed below.

A. Murphy does not teach or suggest
the requisite desirability of selecting a cationic surfactant

One of ordinary skill in the art would not have been motivated to pick and choose the oil-soluble cationic surfactant as presently claimed at least for the reason that *Murphy* does not teach or suggest the desirability of doing so. In

fact, *Murphy* actually **teaches away** from selecting a cationic surfactant, let alone an oil-soluble cationic surfactant as presently claimed.

"A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be . . . led in a direction divergent from the path that was taken by the applicant." *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994). In the present case, a person of ordinary skill would be led in a direction divergent from selecting a cationic surfactant to add to the compositions of Pavlin, as *Murphy* focuses on optional ingredients other than cationic surfactants.

For example, although *Murphy* discloses that "a composition of the invention optionally and preferably includes a surfactant," *Murphy* states that "[p]referably the surfactant is a **nonionic** surfactant or a **nonionic** surfactant blend...." See *Murphy*, col. 9, lines 8-10 (emphasis added). Not one of the fourteen compositions exemplified in *Murphy* comprise **any** type of surfactant other than nonionic surfactants, let alone a cationic surfactant. This is not surprising in view of the fact that almost two full columns, columns 9 and 10, of *Murphy*'s specification are dedicated to a discussion of suitable **nonionic** surfactants and blends thereof.

While *Murphy* also provides one class of examples of suitable anionic surfactants at column 10, lines 47-50, apart from the bare assertion that *Murphy*'s compositions "[i]n addition to nonionic surfactants, anionic or cationic surfactants can be used," the **only** other disclosure of cationic surfactants in the entire patent is the sentence "[e]xemplary cationic surfactants are disclosed in McCutcheon's at pages 272-273, incorporated herein by reference." See

Murphy, col. 10, lines 46-47 and 50-52. McCutcheon's at pages 272 and 273 merely recites a list of commercial brand names of cationic emulsifiers and detergents and provides **no** other information about the products, i.e., the structure of the compound(s) in the product or whether they are oil-soluble, and therefore provides no motivation either.

Further, in contrast to the brief mention of cationic surfactants, Murphy provides a relatively lengthy disclosure concerning each of its other optional ingredients. See, e.g., Murphy, col. 11, lines 10-25 discussing optional preservatives or antioxidants; col. 11, lines 26-61 discussing optional color components and agents affecting the visual character of the compositions; col. 11, line 62 - col. 12, line 26 discussing optional flavor and fragrance components; col. 12, lines 27-38 discussing optional vitamins; and col. 12, line 39 - col. 13, line 9 discussing optional sunscreen and UV absorbers.

Accordingly, the brief disclosure regarding optional cationic surfactants in Murphy, without more, fails to provide the requisite motivation, suggestion or teaching of the desirability of selecting a cationic surfactant, let alone an oil-soluble cationic surfactant as presently claimed.

B. One of ordinary skill in the art would not have been motivated to apply the teachings of Murphy to Pavlin

One of ordinary skill in the art would not have been motivated to combine the teachings of Pavlin and Murphy, as the references fail to teach the desirability of doing so. Specifically, Pavlin and Murphy are drawn to different compositions comprising different components for different purposes which have different

characteristics. For example, Pavlin discloses low molecular weight **ester-terminated polyamides**. See Pavlin, Abstract. In contrast, the polyamide resins of Murphy, such as Versamids, are **not ester-terminated**. See, e.g., Murphy, col. 4, line 39 to col. 5, line 1. Moreover, from the teachings of the references, it appears as though the polyamides in Pavlin impart different characteristics to the compositions in which they are comprised than do the polyamides of Murphy. For example, the goal of *Murphy* is to inhibit syneresis. See, e.g., *id.* at col. 1, line 33 - col. 2, line 9. Murphy asserts that the compositions of "U.S. Patent No. 3,148,125 can be prone to syneresis." See *id.* at col. 1, lines 33-34. Those compositions also comprised non-ester-terminated polyamides such as Versamids. See U.S. Patent No. 3,148,125, col. 2, lines 11-63. Because compositions comprising polyamides like those used in Murphy are prone to syneresis, Murphy requires that its compositions comprise a gelling agent to control the syneresis. See Murphy, col. 7, lines 1-3 (reciting that, "[a]s the amount of gelling agent in the composition decreases, [the] composition loses the ability to resist irreversible syneresis"). In contrast, the "gels of [Pavlin] desirably, and surprisingly **do not exhibit syneresis**." See Pavlin, col. 17, lines 4-6. Moreover, Pavlin discloses that its polyamides **are gelling agents** (see, e.g., *id.* at col. 1, lines 7-8) and does not discuss the need or the option of using additional gelling agents with its polyamide gelling agents.

At least because Pavlin and Murphy are drawn to different compositions comprising different components which have different characteristics, one of ordinary skill in the art would not have been motivated to apply the teachings of

Murphy to the compositions of Pavlin. Similarly, for at least the same reason, one of ordinary skill in the art would not have had the requisite reasonable expectation of success in doing so.

With respect to the alleged obviousness of incorporating a cationic surfactant into the compositions of Pavlin based on Murphy's teachings, Applicants disagree for at least the following additional reason. Murphy discloses that its composition "optionally and preferably includes a surfactant" and asserts that "[t]he surfactant acts as a viscosity modifier or thickener, reduces the susceptibility of the composition to syneresis, and improves the texture of the composition." See Murphy, col. 8, line 67 - col. 9, line 5. However, as discussed above, Pavlin's compositions are **not** susceptible to syneresis, Pavlin does not discuss combining its polyamide gelling agents with a thickener, and Pavlin is silent regarding the texture of its compositions. Accordingly, one of ordinary skill in the art would not have been motivated to include a surfactant to the compositions of Pavlin based on the teachings of Murphy regarding its optional surfactant. Similarly, for at least the same reason, one of ordinary skill in the art would not have had the requisite reasonable expectation of success in doing so.

At least for the foregoing reasons, Applicants submit that the Examiner has failed to establish a prima facie case of obviousness.

C. One of ordinary skill in the art would not have been motivated to apply the teachings of Seidel to Murphy or Pavlin

The Examiner asserts that "Seidel et al. teach using cationic surfactants, including lauryl methyl gluceth-10 hydroxypropyl dimonium chloride, in cosmetic

compositions for adjusting viscosity and achieving a 'rich appearance'" and concludes that

[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to employ lauryl methyl gluceth-10 hydroxypropyl dimonium chloride as a cationic surfactant in compositions of Pavlin et al. in view of Murphy et al. for its art recognized purpose, i.e., for adjusting viscosity, as suggested by Seidel et al. The selection of a known material based on its suitability for its intended use is obvious absent a clear showing of unexpected results attributable to the applicant's specific selection.

See pages 4 and 5 of the present Office Action. Applicants respectfully disagree.

First, Applicants disagree with the Examiner's statement that "Seidel et al. teach using cationic surfactants...in cosmetic compositions for . . . achieving a 'rich appearance.'" *Id.* In contrast, Seidel teaches that "[t]he emulsions according to the invention . . . are distinguished by a rich appearance and by very good flow behavior." See Seidel, col. 4, lines 45-52 (emphasis added). Therefore, Seidel does **not** teach that cationic surfactants are used for "achieving a 'rich appearance.'"

Second, one of ordinary skill in the art would not have been motivated to select Glucquat®100 from Seidel's list of cationic surfactants. Seidel discloses six classes of suitable cationic emulsifiers. See *id.* at col. 3, line 40 - col. 4, line 14. Of these, Seidel discloses that "[p]articularly preferred cationic emulsifiers are quaternary ammonium salts, alkyl amidoamines, and quaternary ester compounds, i.e., the first three classes recited in Seidel. Moreover, **only** these types of cationic emulsifiers are exemplified. That is, not one single composition of Seidel's 20 exemplified compositions comprise any cationic emulsifier other

than quaternary ammonium salts, alkyl amidoamines, and quaternary ester compounds, let alone Glucquat®100. Thus, one of ordinary skill in the art would not have been motivated to select Glucquat®100 from Seidel's list of cationic surfactants at least because *Seidel* fails to provide the requisite motivation to do so.

Finally, one of ordinary skill in the art would not have been motivated to combine the teachings of Seidel and Pavlin or Murphy, as the references fail to teach the desirability of doing so. Like Pavlin and Murphy as compared to each other, Seidel, Pavlin, and Murphy are drawn to different compositions comprising different components for different purposes which have different characteristics. For example, Seidel is drawn to an oil-in-water emulsion comprising (A) water; (B) an oil phase; and (C) an emulsifier system consisting essentially of (i) at least one nonionic emulsifier of formula (I) and (ii) at least one ionic emulsifier selected from the group consisting of cationic and anionic emulsifiers. See, e.g., Seidel, Abstract. In contrast to the compositions of Seidel, neither Pavlin nor Murphy disclose emulsions or the option of including water in their compositions.

The Examiner points to Seidel's general assertion that the "viscosity [of Seidel's oil-in-water emulsions] may be adjusted to the required values with only comparatively small quantities of emulsifier," i.e., of an emulsifier system consisting essentially of (i) at least one nonionic emulsifier of formula (I) and (ii) at least one ionic emulsifier selected from the group consisting of cationic and anionic emulsifiers. Seidel, however, is discussing the effect of its multiple-component emulsifier system on its oil-in-water emulsions. The cationic

emulsifiers disclosed in Seidel may be water-soluble or oil-soluble and no guidance is provided by Seidel as to the solubility of the disclosed cationic surfactants. Accordingly, no guidance is given as to which phase of the emulsion (*i.e.*, oil or water) would undergo the adjustment in viscosity with Seidel's multiple-component emulsifier system.

Thus, the Examiner's assertion that it would have been obvious to use Glucquat®100 "as a cationic surfactant in compositions of Pavlin et al. in view of Murphy et al. for its art recognized purpose, *i.e.*, for adjusting viscosity, as suggested by Seidel et al. fails to satisfy the Examiner's burden. See page 5 of the present Office Action. Specifically, although Seidel may teach that an art-recognized purpose of its multi-component emulsifying system is to adjust the viscosity of its oil-in-water emulsion, such a teaching would still fail to teach which phase of its oil-in-water emulsions undergoes the viscosity adjustment using particular species of emulsifiers. As neither Pavlin's nor Murphy's compositions are emulsions or comprise water, such a teaching in Seidel would fail to give one of ordinary skill in the art sufficient guidance to teach or suggest the desirability of selecting and isolating a cationic surfactant from Seidel's emulsifying system, let alone of selecting Glucquat®100.

Accordingly, Seidel fails to provide the requisite motivation, suggestion or teaching of the desirability of selecting a cationic surfactant, let alone an oil-soluble cationic surfactant as presently claimed, and further let alone of isolating it and adding it to the compositions of Pavlin.

For at least the foregoing reasons, the Examiner has failed to demonstrate a prima facie case of obvious and, therefore, Applicants request that this rejection be withdrawn.

IV. Conclusion


In view of the foregoing remarks, Applicants respectfully request that the requirements be withdrawn.

If there is any additional fee due in connection with the filing of this Response, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

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